

# High Performance Computing Software

*JPL Internal Seminar Series*



## **Parallel Discrete Event Simulation**

by

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**Thursday, March 13, 2003**

**12:00 noon – 1:00 p.m.**

**Building 126, Room 225**

Discrete event simulation is a fairly straightforward way of modeling interactions between components of a complex system. Complications arise when this is implemented on a parallel system. Parallelizing a discrete event simulation can introduce causality errors if steps are not taken to avoid this. Both optimistic and conservative strategies exist to prevent causality errors. This talk describes the overall problem, focusing on optimistic strategies, and highlights the SPEEDES framework for running parallel discrete event simulations. SPEEDES has been successfully implemented on JPL's Origin 2000 system.

For questions, please contact Hans Zima at 4-8980.